

STRIKE® PLUS 50 WDG

EPA Registration Number: 432-1513-59807

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name : STRIKE® PLUS 50 WDG

EPA Registration No. : 432-1513-59807

Relevant identified uses of the substance or mixture and uses advised against

Description : Fungicide

Restrictions on use : See product label for restrictions.

Company information : OHP, Inc.
PO Box 51230
Mainland, PA 19451
(800) 659-6745

TRANSPORTATION EMERGENCY

(24 hours a day) call : Chemtrec: 1-800-424-9300

MEDICAL EMERGENCY (24 hours a day) and Product Information call : 1-800-356-4647

SDS Information or

Request : ohp.com

2. HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Skin sensitisation : Category 1B

Skin irritation : Category 2

Eye irritation : Category 2B

Acute toxicity (Inhalation) : Category 3

Acute toxicity (Oral) : Category 4



Signal word : Danger

Hazard statements

May cause an allergic skin reaction.

Causes skin irritation.

Causes eye irritation.

Toxic if inhaled.

Harmful if swallowed.

Precautionary statements

Avoid breathing dust, mist, spray.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Do not eat, drink or smoke when using this product.

IF ON SKIN : Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician.

IF SWALLOWED : Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local regulation.

Other hazards : No other hazards known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Average % by weight
Triadimefon	43121-43-3	41.67
Trifloxystrobin	141517-21-7	8.33
Sodium dodecylbenzenesulfonate	25155-30-0	1.83
Crystalline quartz (respirable)	14808-60-7	0.37

4. FIRST AID MEASURES

Description of first aid measures

General advice : When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

FIRST AID MEASURES continued next page

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FIRST AID MEASURES continued

Inhalation: Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

Skin contact: Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

Eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.

Ingestion: Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms: To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

Treatment: Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable: Carbon dioxide (CO₂), Dry chemical, Foam

Unsuitable: None known.

Special hazards arising from the substance or mixture

Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment

for fire-fighters: Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information: Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point: not applicable

Autoignition temperature: no data available

Lower explosion limit: not applicable

Upper explosion limit: not applicable

Explosivity: no data available.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions: Avoid dust formation. Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up

Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice: Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal. Do not allow product to contact nontarget plants.

Reference to other sections

Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

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7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling . . . : Handle and open container in a manner as to prevent spillage.

Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Advice on protection against

fire and explosion : Keep away from heat and sources of ignition.

Hygiene measures : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers : Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Triadimefon	43121-43-3	0.7 mg/m3 (TWA)		OES BCS*
Triadimefon	43121-43-3	100 ug/m3 (ST ESL)	07 2011	TX ESL
Triadimefon	43121-43-3	10 ug/m3 (AN ESL)	07 2011	TX ESL
Trifloxystrobin	141517-21-7	2.7 mg/m3 (TWA)		OES BCS*
Sodium dodecylbenzenesulfonate (Particulate.)	25155-30-0	50 ug/m3 (ST ESL)	02 2013	TX ESL
Sodium dodecylbenzenesulfonate (Vapor.)	25155-30-0	1000 ug/m3 (ST ESL)	02 2013	TX ESL

Control parameters *continued*

Components	CAS-No.	Control parameters	Update	Basis
Sodium dodecylbenzenesulfonate (Vapor.)	25155-30-0	100 ug/m3 (AN ESL)	02 2013	TX ESL
Sodium dodecylbenzenesulfonate (Particulate.)	25155-30-0	5 ug/m3 (AN ESL)	02 2013	TX ESL
Crystalline quartz (respirable) (Respirable fraction.)	14808-60-7	0.025 mg/m3 (TWA)	02 2012	ACGIH
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.05 mg/m3 (REL)	2010	NIOSH
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA)	1989	OSHA Z1A
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA)	06 2008	TN OEL
Crystalline quartz (respirable) (Particulate.)	14808-60-7	0.27 ug/m3 (AN ESL)	02 2013	TX ESL
Crystalline quartz (respirable) (Particulate.)	14808-60-7	14 ug/m3 (ST ESL)	02 2013	TX ESL
Crystalline quartz (respirable) (Total dust.)	14808-60-7	0.3 mg/m3 (TWA PEL)	08 2010	US CA OEL
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.1 mg/m3 (TWA PEL)	08 2010	US CA OEL
Crystalline quartz (respirable) (Respirable.)	14808-60-7	2.4 millions of particles per cubic foot of air (TWA)	2000	Z3
Crystalline quartz (respirable) (Respirable.)	14808-60-7	0.1 mg/m3 (TWA)	2000	Z3
Crystalline quartz (respirable) (Total dust.)	14808-60-7	0.3 mg/m3 (TWA)	2000	Z3
Kaolin (Respirable fraction.)	1332-58-7	2 mg/m3 (TWA)	02 2012	ACGIH
Kaolin (Respirable.)	1332-58-7	5 mg/m3 (REL)	2010	NIOSH
Kaolin (Total)	1332-58-7	10 mg/m3 (REL)	2010	NIOSH

EXPOSURE CONTROLS / PERSONAL PROTECTION Control parameters
continued next page

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Control parameters *continued*

Components	CAS-No.	Control parameters	Update	Basis
Kaolin (Respirable fraction.)	1332-58-7	5 mg/m3 (TWA)	06 2008	TN OEL
Kaolin (Total dust.)	1332-58-7	10 mg/m3 (TWA)	06 2008	TN OEL
Kaolin (Particulate.)	1332-58-7	20 ug/m3 (ST ESL)	02 2013	TX ESL
Kaolin (Particulate.)	1332-58-7	2 ug/m3 (AN ESL)	02 2013	TX ESL
Kaolin (Respirable dust.)	1332-58-7	2 mg/m3 (TWA PEL)	08 2010	US CA OEL
Sodium aluminium silicate (Respirable fraction.)	1344-00-9	1 mg/m3 (TWA)	02 2012	ACGIH
Sodium aluminium silicate (Particulate.)	1344-00-9	5 ug/m3 (AN ESL)	02 2013	TX ESL
Sodium aluminium silicate (Particulate.)	1344-00-9	50 ug/m3 (ST ESL)	02 2013	TX ESL
Sodium lignosulphonate (Particulate.)	8061-51-6	5 ug/m3 (AN ESL)	02 2013	TX ESL
Sodium lignosulphonate (Particulate.)	8061-51-6	50 ug/m3 (ST ESL)	02 2013	TX ESL

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection . . . : When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection : Chemical resistant nitrile rubber gloves

Eye protection : Chemical resistant goggles must be worn.

Skin and body protection : Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures : Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.

Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : tan
- Physical State** : water-dispersible granules
- Odor** : characteristic
- Odour Threshold** : no data available
- pH** : 7.5
- Vapor Pressure** : not applicable
- Vapor Density (Air = 1)** : not applicable
- Bulk density** : 32 - 38 lb/ft³
- Evaporation rate** : not applicable
- Boiling Point** : not applicable
- Melting / Freezing Point** : no data available
- Water solubility** : dispersible
- Minimum Ignition Energy** : no data available
- Decomposition temperature** : no data available
- Partition coefficient: n-octanol/water** : no data available
- Viscosity** : not applicable
- Flash point** : not applicable
- Autoignition temperature** : no data available
- Lower explosion limit** : not applicable
- Upper explosion limit** : not applicable
- Explosivity** : no data available

10. STABILITY AND REACTIVITY

- Reactivity**
 - Thermal decomposition** . . . : no data available
 - Chemical stability** : Stable under normal conditions.
- Possibility of hazardous reactions** : No dangerous reaction known under conditions of normal use.
- Conditions to avoid** : Heat, flames and sparks.
- Incompatible materials** . . . : Strong oxidizing agents, Acids
- Hazardous decomposition products** : Hydrogen chloride (HCl)
Amines
Nitrogen oxides (NOx)
Carbon monoxide

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11. TOXICOLOGICAL INFORMATION

Exposure routes : Eye contact, Skin contact,
Inhalation, Ingestion

Immediate Effects

Eye : Moderate eye irritation.

Skin : Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if absorbed through skin.

Ingestion : Harmful if swallowed.

Inhalation : Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity : LD50 (rat) > 500 - 5,000 mg/kg

Acute inhalation toxicity . . . : LC50 (rat) > 0.5 - 2.0 mg/l
Exposure time: 4 h
Determined in the form of dust.

LC50 (rat) > 2.0 - 8.0 mg/l
Exposure time: 1 h
Determined in the form of dust.
Extrapolated from the 4 hr LC50.

Acute dermal toxicity : LD50 (rat) > 2,000 - 5,000 mg/kg

Skin irritation : Moderate skin irritation. (rabbit)

Eye irritation : Mild eye irritation. (rabbit)

Sensitisation : (guinea pig)
May cause sensitisation by skin contact.

Assessment repeated dose toxicity

Triadimefon did not cause specific target organ toxicity in experimental animal studies.

Trifloxystrobin did not cause specific target organ toxicity in experimental animal studies.

Assessment Mutagenicity

Triadimefon was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Trifloxystrobin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Triadimefon was not carcinogenic in a lifetime feeding study in rats. Triadimefon caused an increased incidence of tumours in mice in the following organ(s): liver. The mechanism that triggers these tumours is not relevant to humans.

Trifloxystrobin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

Crystalline quartz (respirable) 14808-60-7 Group A2

NTP

Crystalline quartz (respirable) 14808-60-7

IARC

Crystalline quartz (respirable) 14808-60-7 Overall evaluation: 1

OSHA

None.

Assessment toxicity to reproduction

Triadimefon caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. Triadimefon caused reduced fertility, a reduced pup survival.

Trifloxystrobin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Trifloxystrobin is related to parental toxicity.

Assessment developmental toxicity

Triadimefon caused developmental toxicity in only at dose levels toxic to the dams. Triadimefon caused an increased incidence of non-specific malformations.

Trifloxystrobin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Trifloxystrobin are related to maternal toxicity.

Further information

Acute toxicity studies have not been performed on this product as formulated.

Acute toxicity studies have been bridged from a similar formulation(s).

The non-acute information pertains to the active ingredient(s).

12. ECOLOGICAL INFORMATION

Toxicity to fish : LC50 (Rainbow trout (Oncorhynchus mykiss))
4.08 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient triadimefon.

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LC50 (Rainbow trout (Oncorhynchus mykiss))
0.015 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient trifloxystrobin.

Toxicity to aquatic invertebrates

EC50 (Water flea (Daphnia magna)) 7.16 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient triadimefon.

EC50 (Water flea (Daphnia magna)) 0.016 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient trifloxystrobin.

Toxicity to aquatic plants : IC50 (Pseudokirchneriella subcapitata) 2.01 mg/l
Exposure time: 120 h
The value mentioned relates to the active ingredient triadimefon.

IC50 (Desmodesmus subspicatus) 0.0053 mg/l
Growth rate; Exposure time: 72 h
The value mentioned relates to the active ingredient trifloxystrobin.

Biodegradability : Triadimefon: not rapidly biodegradable
Trifloxystrobin: not rapidly biodegradable

Koc : Triadimefon: Koc:150 - 510
Trifloxystrobin: Koc:2377

Bioaccumulation : Triadimefon: Bioconcentration factor (BCF) 31
Does not bioaccumulate.
Trifloxystrobin: Bioconcentration factor (BCF) 431
Does not bioaccumulate.

Mobility in soil : Triadimefon: Moderately mobile in soils
Trifloxystrobin: Slightly mobile in soils

Environmental precautions
Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.
Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.

Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment washwater.
Apply this product as specified on the label.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product : Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law.

If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Contaminated packaging : Do not re-use empty containers.

Triple rinse containers.

Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities.
If burned, stay out of smoke.

Follow advice on product label and/or leaflet.

RCRA Information : Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

14. TRANSPORT INFORMATION

49CFR : Not dangerous goods / not hazardous material

IMDG

UN number : 3077

Class : 9

Packaging group : III

Marine pollutant : YES

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRIFLOXYSTROBIN, TRIADIMEFON MIXTURE)

IATA

UN number : 3077

Class : 9

Packaging group : III

STRIKE® PLUS 50 WDG

EPA Registration Number: 432-1513-59807

Environm.

Hazardous Mark: YES

Proper shipping name . . . : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRIFLOXYSTROBIN, TRIADIMEFON MIXTURE)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

Crystalline quartz (respirable) 14808-60-7 MN

Canadian Regulations

Canadian Domestic Substance List

Sodium dodecylbenzenesulfonate 25155-30-0

Crystalline quartz (respirable) 14808-60-7

Environmental

CERCLA

Sodium dodecylbenzenesulfonate 25155-30-0 1,000 lbs

Clean Water Section 307

Priority Pollutants: None.

Safe Drinking Water Act Maximum Contaminant Levels: None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Triadimefon 43121-43-3

Sodium dodecylbenzenesulfonate 25155-30-0

Crystalline quartz (respirable) 14808-60-7

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: Moderate eye irritation.

Harmful if swallowed, inhaled or absorbed through the skin.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Avoid breathing dust or spray mist.

Avoid contact with skin, eyes and clothing.

15. REGULATORY INFORMATION

EPA Registration No.: 432-1513-59807

US Federal Regulations

TSCA list

Sodium dodecylbenzenesulfonate 25155-30-0

Crystalline quartz (respirable) 14808-60-7

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D): None.

SARA Title III - Section 302 - Notification and Information: None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

Triadimefon 43121-43-3 25,000lbs

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Crystalline quartz (respirable) 14808-60-7

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Triadimefon 43121-43-3 Developmental toxin.

Triadimefon 43121-43-3 Male reproductive toxin.

Triadimefon 43121-43-3 Female reproductive toxin.

US State Right-To-Know Ingredients

Triadimefon 43121-43-3 NJ

Sodium dodecylbenzenesulfonate 25155-30-0 CA, CT

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16. OTHER INFORMATION**NFPA 704 (National Fire Protection Association):**

Health - 2 Flammability - 1 Instability - 1 Others - none

**HMIS (Hazardous Materials Identification System,
based on the Third Edition Ratings Guide)**

Health - 2 Flammability - 1 Physical Hazard - 1 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard,
3 = severe hazard, 4 = extreme hazard**Reason for Revision**: Revised according to the
current OSHA Hazard Communication Standard
(29CFR1910.1200)**Revision Date**.: 01/06/2014This information is provided in good faith but without
express or implied warranty. The customer assumes all
responsibility for safety and use not in accordance with
label instructions.

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